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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,197	01/29/2001	Joseph J. Sanelle	81285CIP	9117

23685 7590 06/04/2003  
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EXAMINER
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CHUNG, DAVID Y

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/772,197	SANELLE ET AL.	
	Examiner David Y. Chung	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 16 April 2003.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,7-10,13,14,17-24,28-37 and 42-54 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,5,6,11,12,15,16,25-27 and 38-41 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                               | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6 and 7</u> . | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 11 and 12 rejected under 35 U.S.C. 102(b) as being anticipated by Abileah et al. (U.S. 5,579,139).

Abileah et al. discloses an active matrix type liquid crystal display device having reduced canopy reflection. Note in figure 2, rear polarizer 25, front polarizer 33, backlight 37 and liquid crystal layer 29. Note that the transmission axis of rear polarizer 25 is perpendicular to the transmission axis of front polarizer 33 as shown in figure 2.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 5, 6, 11, 12, 15 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Kono et al. (U.S. 4,723,836).

As to claims 1, 5, 15 and 16, Kono et al. discloses a conventional handwritten character input tablet in figure 1. Note transparent substrates 2 and 3, liquid crystal layer 9, polarizers 1 and 4, and transparent tablet 6.

Although Kono et al. does not disclose that the polarizers are crossed, it would have been obvious to one of ordinary skill in the art at the time of invention to do this with normally white mode twisted nematic displays and normally black mode vertically aligned displays.

As to claims 2 and 6, Kono et al. does not explicitly disclose that the substrates are made of glass. However, it was well known and obvious to make substrates from glass because of the level of transparency in glass. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to make the substrates in a liquid crystal display from glass because of the high degree of transparency.

3. Claims 25-27 and 38-41 rejected under 35 U.S.C. 103(a) as being unpatentable over Broer et al. (U.S. 5,808,713) in further view of Larson et al. (U.S. 6,392,727) and Kono et al. (U.S. 4,723,836).

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As to claims 25, 38 and 41, Broer et al. discloses a flat-panel display device having a picture display panel for modulating the state of polarization of polarized light. Note in figure 1, electro-optic material 13, substrates 15 and 17, transparent electrodes 19 and 21, and polarizers 27 and 31. Broer et al. teaches arranging polarizer 27 so that it is not in contact with surface 25 of substrate 15 so as to avoid conductance of light in the polarizer. Broer et al. teaches either leaving an air gap 28 between the display panel 3 and polarizer 27, or securing the polarizer 27 to the picture display panel 3 by means of an adhesive having a low refractive index.

Broer et al. does not teach adhering the front or rear polarizer to the display panel using an index-matched optical bonding material or index-matched pressure-sensitive adhesive. Larson et al. teaches suppression of residual reflection by applying adhesives between a glass substrate and polarizer to bond the substrate to the polarizer and achieve some level of index matching, which tends to reduce the reflectances from the boundary between the substrate and polarizer. See column 1, lines 39-44. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to adhere the front and rear polarizer to the substrates in the device of Broer et al. using an index-matched pressure sensitive adhesive or optical bonding material in order to suppress residual reflection.

Broer et al. does not disclose a transparent cover. Kono et al. discloses a transparent substrate 6 in figure 1. The substrate acts as a tablet for accepting input to a handwritten character input device. See column 1, lines 1-30. Similarly, it was well known and obvious to provide a transparent cover for use as a touch screen.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a transparent cover to the device of Broer et al. for use as a touch screen or input tablet.

As to claims 26, 27, 39 and 40, Broer et al. discloses that substrates 15 and 17 can be made of glass or synthetic material. See column 6, lines 20-24. It was well known and obvious to make substrates of plastic because it was both transparent and more durable and shock resistant than glass. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to form the substrates from plastic because of its durability and shock resistance.

***Election/Restrictions***

4. Applicant's election with traverse of Group V (claims 25-27 and 38-41) in Paper No. 9 is acknowledged. The traversal is on the ground(s) that a serious burden has not been established. This is not found persuasive because each subcombination has a separate classification as previously indicated, and would require separate fields of search. See MPEP § 808.02.

The requirement is still deemed proper and is therefore made FINAL.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Chung whose telephone number is (703) 306-0155. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:00 pm.

  
ROBERT H. KIM  
SUPERVISORY SPECIAL AGENT EXAMINER  
TELEPHONE NUMBER 202-205-2300